PATENT

(Case No. 97,022	
Dunlay, et al.) Examiner: To be assigned Art Unit: 1641
Serial No.: 10/686,161 Filed: October 15, 2003 For: A System for Cell-Based Screening)) Confirmation No.: 6805)
Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 TRANSMITTAL	LETTER
Sir:	
1. We are transmitting herewith the attached papers f	or the above identified patent application:

Return Receipt Postcard.

No fee required.

With respect to fees:

☐ Transmittal (in duplicate);

3. GENERAL AUTHORIZATION TO CHARGE OR CREDIT FEES: Please charge any additional fees or credit overpayment to Deposit Account No. 13-2490. A duplicate copy of this sheet is enclosed.

candor as set forth in 37 CFR section 1.56 pursuant to 37 CFR section 1.98(d) (sheets);

Information Disclosure Statements (IDS) and 1449 Forms in compliance with the continuing duty of

CERTIFICATE OF MAILING BY "EXPRESS MAIL" UNDER 37 CFR § 1.10: The undersigned 4. hereby certifies that this Transmittal Letter and the papers, as described in paragraph 1 herein-above, are being deposited with the United States Postal Service with sufficient postage as "Express Mail Post Office to Addressee" in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this _____day of January, 2005. Express Mail No. EV595490362US.

By:

David S. Harper Reg. No. 42,636



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE (Case No. 97,022-B2-CO)

In application	on of:)
	R. Terry Dunlay, et al.) Examiner: TBA
Serial No.	10/686,161	Group Art Unit: 1641
Filed:	October 15, 2003	Confirmation No.: 6805
For A Sy	stam for Call-Rasad Screening	}

INFORMATION DISCLOSURE STATEMENT

Honorable Commissioner of Patents and Trademarks P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 C.F.R. Section 1.97 - 1.99, the Applicant wishes to make the following references of record in the above-identified application. This Information Disclosure Statement is in compliance with the continuing duty of candor as set forth in 37 C.F.R. Section 1.56. Pursuant to 37 C.F.R. §1.98(d), copies of references numbered 1-193 are not provided herewith, since they were previously filed in the parent application serial no. 09/724,376.

Applicants do not believe any fee is due with this submission. If this belief be in error and the Patent Office determines that the fee prescribed in the relevant portion of 37 C.F.R. Section 1.97 is applicable, the undersigned attorney by his signature hereby authorizes any such fee to be debited from Deposit Account 13-2490.

	within three months of the filing date of a national application; within three months of the date of entry into the national stage as set forth in 37 C.F.R. § 1.491 in an international application; or before the mailing date of a first Office Action on the merits. 37 C.F.R. §1.97 (b)
	after three months of the filing date of a national application, or the date of entry into the national stage as set forth in 37 C.F.R. § 1.491 in an international application; or after the mailing date of a first Office Action on the merits, but <u>before</u> the mailing date of a Final Action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311 (whichever occurs first), and includes (37 C.F.R. § 1.97 (c):
	the Certification under 37 C.F.R. § 1.97(e) (see "Certification" below)
	OR
	the fee of \$180.00 set forth in 37 C.F.R. § 1.17(p) (see "Fees" below).
	after a Final Action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311 (whichever occurs first), but before, or simultaneously with, the payment of the issue fee, and includes the Certification under 37 C.F.R. § 1.97(e) (see "Certification" below), and the Petition Fee set forth in 37 C.F.R. § 1.17(i) (see "Fees" and "Method of Payment of Fees" below). Applicants hereby petitions for consideration of the Information Disclosure Statement submitted herewith and the accompanying references in examination of the subject patent application.
<u>CERT</u>	<u>TIFICATION</u>
	The undersigned hereby certifies that each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign patent application not more than three months prior to the filing of the Information Disclosure Statement.
	The undersigned hereby certifies that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign patent application or, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of the Information Disclosure Statement.

FEES	No fee is owed by the applicant(s). The IDS Fee of \$180.00 under 37 C.F.R. § The Petition Fee of \$130.00 set forth in 37	
METH	HOD OF PAYMENT OF FEES Attached is a check in the amount of \$180.0 Charge Deposit Account No. 13-2490 in the communication is enclosed for that purpose	e amount of \$. (A duplicate copy of this
comm		any overpayment in connection with this. A duplicate copy of this communication is
this co with the an enverage 1450,	orrespondence and all attached paper(s) or fe the United States Postal Service as EXPRES relope addressed to: Commissioner for Pate	MAIL" (37 CFR 1.10) I hereby certify that e(s) is being deposited with sufficient postage, S MAIL POST OFFICE TO ADDRESSEE in ents, P.O. Box 1450, Alexandria, VA 22313-Day of <u>January</u> , 2005. under Express Mail
		Respectfully submitted,
Date:	1-12-05	David S. Harper Registration No. 42,636
	none: 312-913-0001 nile: 312-913-0002	McDonnell Boehnen Hulbert & Berghoff 300 South Wacker Drive Chicago, IL 60606

I. United States Patents

1. Chalfie et al., United States Patent No. 5,491,084, issued February 13, 1996.

- 2. Harpold et al., United States Patent No. 5,401,629, issued March 28, 1995.
- 3. Harpold et al., United States Patent No. 5,436,128, issued July 25, 1995.
- 4. Horan et al., United States Patent No. 4,783,401, issued November 8, 1998.
- 5. Horan et al., United States Patent No. 4,762,701, issued August 9, 1988.
- 6. Horan et al., United States Patent No. 4,859,584, issued August 22, 1989.
- 7. Dunlay et al., United States Patent No. 5,989,835, issued November 23, 1999.
- 8. Taylor, United States Patent No. 6,103,479, issued August 15, 2000.
- 9. Hozier, United States Patent No. 5,326,691, issued July 5, 1994.
- 10. Winkler, et al., United States Patent No. 5,384,261, Issued January 24, 1995.
- 11. Ivarrson, et al., United States Patent No. 5,313,264, Issued May 17, 1994.
- 12. Jansson, et al., United States Patent No. 4,673,988, Issued June 16, 1987.
- 13. Leaback, United States Patent No. 5,096,807, Issued March 17, 1992.
- 14. Lockhart, et al., United States Patent No, 5,556,752, Issued September 17, 1996.
- 15. Pirrung, et al., United States Patent No. 5,143,854, Issued September 1, 1992.
- 16. Georger, et al., United States Patent No. 5,324,591, Issued June 28, 1994.
- 17. Carlotta, et al., United States Patent No. 5,233,369, Issued August 3, 1993.
- 18. Carlotta, et al., United States Patent No. 5,486,855, Issued January 23, 1996.
- 19. Hoisington, et al., United States Patent No. 5,502,467, Issued March 26, 1996.
- 20. Hemstreet, et al., United States Patent No. 4,982,739, Issued January 8, 1991.
- 21. Boris, et al., United States Patent No. 5,031,797, Issued July 16, 1991.
- 22. Zanzucchi, et al., United States Patent No. 5,585,069, Issued December 17, 1996.

23. Swedberg, et al., United States Patent No. 5,571,410, Issued November 5, 1996.

÷. 🚙

- 24. Kaltenbach, United States Patent No. 5,500,071, Issued March 19, 1996.
- 25. Craighead, et al., United States Patent No. 4,344,816, Issued August 17, 1982.
- 26. Kelly, et al., United States Patent No. 5,581,487, Issued December 3, 1996.
- 27. Dovichi, et al., United States Patent No. 5,567,294, Issued October 22, 1996.
- 28. Reinhartz, et al., United States Patent No. 5,527,673, Issued June 18, 1996.
- 29. Price, et al., United States Patent No. 5,548,661, Issued August 20, 1996.
- 30. Schroeder, et al., United States Patent No. 5,355,215, Issued October 11, 1994.
- 31. Akong, et al., United States Patent No. 5,670,113, Issued September 23, 1997.
- 32. Zhou, et al., United States Patent No. 5,732,150, Issued March 24, 1998.
- 33. Price, et al., United States Patent No. 5,790,710, Issued August 4, 1998.
- 34. Kamentsky, et al., United States Patent No. 5,885,840, Issued March 23, 1999.
- 35. Kamentsky, et al., United States Patent No. 5,072,382, Issued December 10, 1991.
- 36. Kamentsky, et al., United States Patent No. 5,107,422, Issued April 21, 1992.
- 37. Kamentsky, et al., United States Patent No. 4,647,531, Issued March 3, 1987.
- 38. Okun, et al., United States Patent No. 5,919,646, Issued July 6, 1999.

II. Foreign Documents

- 39. Haseloff et al., WO 96/27675, published September 12, 1996.
- 40. Thastrup et al., WO 96/23898, published August 8, 1996.
- 41. Ward et al., WO 95/21191, published August 10, 1995.

- 42. Chalfie, et al., WO 95/07463, published March 16, 1995.
- 43. Lee et al., WO 96/09598, published March 28, 1996.
- 44. Moore, et al., WO 94/11841, published May 26, 1994.
- 45. Bacus, et al., WO 87/02802, published May 7, 1987.
- 46. Japanese Patent No. 4(1992)-69776, Issued March 4, 1992.
- 47. Japanese Patent No. H1-165958, Issued June 29, 1989.
- 48. Japanese Patent No. 5-501151, Issued March 4, 1993.
- 49. Japanese Patent No. S61-31282, Issued February 4, 1986.

III. Other Documents

- 50. Aplin and Hughes, (1997), Anal. Biochem., 113: pp. 144-148.
- 51. Bailey, et al., (1993), Nature, 366: pp. 44-48.
- 52. Barak et al., (1997), J. Biol. Chem, 272(44):27497-27500.
- 53. Barber et al., (1996), Neuroscience Letters, 207:17-20.
- 54. Beggs (1997), J. of Biomolec. Screening, 2(2):71-78.
- 55. Bell, Jr., et al., (1987), J. Histochem. And Cytochem., 35: pp. 1375-1380.
- 56. Bhatia, et al., (1993), Analytical Biochemistry, 208: pp. 197-205.
- 57. Brejc, et al., (1997), Proc. Natl. Acad. Sci., 94: pp. 2306-2311.
- 58. Bright et al., (1987), J. Cell Biol., 104:1019-1033.
- 59. Bright et al., (1989), Methods in Cell Biology, 30:157-192.
- 60. Bright et al., (1989), J. Cell. Physiol., 141:410-419.
- 61. Bright et al., (1996), Cytometry, 24:226-233.

- 62. Brinkley, (1992), Bioconjugate Chem., 3: pp. 2-13.
- 63. Bulinski et al., (1997), J. Cell Science, 110: pp. 3055-3064.
- 64. Calvert, et al., (1994), Journal of Vacuum Science and Technology B12: pp. 3884-3997.
- 65. Calvert, et al., (1995), In Thin Films, Vol. 20: Organic Thin Films and Surfaces: Directions for the Nineties, A. Ulman, Ed., Academic Press, Boston, pp. 109-141.
- 66. Chalfie et al., (1994), Science, 263:802-805.
- 67. Channavajjala, et al., (1997), J. Cell. Sci., 110: pp. 249-256.
- 68. Chen et al., (1997), Biophysical Journal, 72: pp. 37-50.
- 69. Cheng, et al., (1996), Nature Biotechnology, 14: pp. 606-609.
- 70. Chrisey, et al., (1994), Proceedings, Materials Research Society, 330: pp. 179-184.
- 71. Chrisey, et al., (1996), Nucleic Acids Research, 24: pp. 3031-3039.
- 72. Chrisey, et al., (1996), Nucleic Acids Research, 24: pp. 3040-3047.
- 73. Clarke and McNeil, (1992), J. Cell Science, 102: pp. 533-541.
- 74. Clarke et al., (1994), BioTechniques, 17: pp. 1118-1125.
- 75. Cohen, (1997), Biochemical J., 326:1-16.
- 76. Craighead, et al., (1980), Appl. Phys. Lett., 37: pp. 653-655.
- 77. Craighead, et al., (1982), J. Vac. Sci. Technology., 20: pp. 316-319.
- 78. Cubitt et al., (1995), Trends in Biochemical Science, 20:448-455.
- 79. Daaka et al., (1998), J. Biol. Chem., 273(2):685-688.
- 80. Davis et al., (1995), Dev. Biology, 170:726-729.
- 81. DeBiasio et al., (1996), Mol. Biol. Cell, 7:1259-1282.
- 82. Denk et al., (1990), Science, 248: pp. 73-76.
- 83. Deprez et al., (1997), J. Biol. Chem., 272(28):17269-17275.

- 84. Dulcey, et al., (1991), Science, 252: pp. 551-554.
- 85. Dulcey, et al., (1996), Langmuir, 12: pp. 1638-1650.
- 86. Ehrig, et al., (1995), FEBS Letter, 367: pp. 163-166.
- 87. Ellenberg et al., (1997), J. Cell Biol., 138(6):1193-1206.
- 88. Farkas et al., (1993), Annu. Rev. Physiol., 55:785-817.
- 89. Federov et al., (1994), J. Mol. Biol., 241:480-482.
- 90. Firestone et al., (1991), Cytometry, 12:195-206.
- 91. Frisch, et al., (1996), Bioconjugate Chem., 7: pp. 180-186.
- 92. Gerrittsen et al., (1997), J. of Fluorescence, 7(1):11-15.
- 93. Giuliano et al., (1995), Curr. Op. Cell Biol., 7:4-12.
- 94. Giuliano et al., (1995), Methods in Neuroscience, 27:1-16.
- 95. Giuliano et al., (1987), Anal. Biochem., 167:362-371.
- 96. Giuliano et al., (1990), Optical Microscopy for Biology, pp. 543-557.
- 97. Giuliano et al., (1995), Annu. Rev. of Biophysics and Biomolecular Structure, 24:405-434.

÷ <u>.</u>.

- 98. Giuliano, (1996), Cell Motil. Cytoskel., 35:237-253.
- 99. Go et al., (1997), Analytical Biochemistry, 247:210-215.
- 100. Goldmacher, et al., (1992), Bioconjugate Chem., 3: pp. 104-107.
- 101. Goldman et al., (1995), Experimental Cell Research, 221:311-319.
- 102. Gonzales et al., (1995), Biophysics J., 69: pp. 1272-1280.
- 103. Gonzales et al., (1987), Digital Image Processing, pp. 391-448.
- 104. Gough et al., (1993), J. Cell Biol., 121(5):1095-1107.
- 105. Grabarek and Gergely, (1990), Anal. Biochem., 185: pp. 131-135.

- 106. Graham et al., (1973), Virology, 52:456-467.
- 107. Gratton et al., (1994), Proc. of the Microscopical Society of America, pp. 154-155.

. ¥' _{\$8} _

- 108. Groen et al., (1985), Cytometry, 6:81-91.
- 109. Hahn et al., (1992), Nature, 359:736-738.
- 110. Hahn et al., (1993), Fluorescent and Luminescent Probes for Biological Activity, W.T. Mason, (ed.), pp. 349-359, Academic Press, San Diego.
- 111. Harms et al., (1984), Cytometry, 5:236-243.
- 112. Harootunian et al., (1993), Mol. Biol. of the Cell, 4:993-1002.
- 113. Haselhoff, et al., (1997), Proc. Natl. Acad. Sci., 94: pp. 2122-2127.
- 114. Haugland, Fluorescent Tracers of cell morphology and fluid flow, in Handbook of Fluorescent Probes and Research Chemicals, 6th edition, ed. By Spence, Molecular Probes, Inc. Eugene OR, PP. 325-331, (1996).
- 115. Heim and Tsien, (1996), Curr. Biol., 6:178-182.
- 116. Htun et al., (1996), Proc. Natl. Acad. Sci., 93:4845-4850.
- 117. Hu et al., (1995), FEBS Letters, 369:331-334.
- 118. Johnson et al., (1996), Cell, 85:149-158.
- 119. Johnson et al., (1985), J. Electron Microscopy Tech., 2: pp. 129-138.
- 120. Kaether et al., (1995), FEBS Letters, 369:267-271.
- 121. Kahl, et al., (1997), J. Biomol. Screening, 2: pp. 33-40.
- 122. Kapur, et al., (1996), Journal of Biomedical Materials Research, 33: pp. 205-216.
- 123. Kebler et al., (1996), FEBS Letters, 395:225-227.
- 124. Kessler et al., (1991), Spectrochimica Acta, 47A(2):187-192.
- 125. Kislauskis et al., (1994), J. Cell Biol., 127(2):441-451.
- 126. Kittler et al., (1985), Computer Vision, Graphics, and Image Processing, 30:125-147.

127. Kleinfeld, et al., (1988), J. Neuroscience, 8: pp. 4098-4120.

* *

- 128. Lakowicz et al., (1992), Anal. Biochem., 202:316-330.
- 129. Lambrechts et al., (1995), Eur. J. Biochem., 230:281-286.
- 130. Lee et al., (1996), Biochemistry, 35:6010-6019.
- 131. Lee et al., (1997), Biochemistry, 36:2701-2708.
- 132. Liang et al., (1997), J. of Molec. Biol., 274:291-302.
- 133. Lopez, et al., (1993), J. Am. Chem. Soc., 115: pp. 5877-5878.
- 134. Martinez-Zaguilan et al., (1996), Am. J. Physiol., 270:C1438-C1446.
- 135. McCaffrey et al., (1996), J. Biomolec. Screening, 1(4):187-190.
- 136. McCann et al., (1997), Proc. Natl. Acad. Sci., 94:5679-5684.
- 137. McKenzie, et al., (1988), J. Prot. Chem., 7: pp. 581-592.
- 138. McNeil et al., (1984), J. Cell Biol. 98: pp. 1556-1564.
- 139. McNeil, (1989), Methods in Cell Biology, 29:153-173.
- 140. Morise et al., (1974), Biochemistry, 13(12):2656-2662.
- 141. Mrkisch and Whitesides, (1996), Ann. Rev. Biophys. Biomol. Struct., 25: pp. 55-78.
- 142. Oancea et al., (1998), The Journal of Cell Biology, 140(3): pp. 485-498.
- 143. Palm et al., (1997), Nat. Struct. Biol., 4(5):361-365.
- 144. Pillai, (1987), In Organic Photochemistry Volume 9, ed. A. Padwa, Marcel Dekker, Inc. NY, pp. 225-323.
- 145. Pillai, (1980), Synthesis, pp. 1-26.
- 146. Poot, et al., (1996), J. Histochem. And Cytochem., 44: pp. 1363-1372.
- 147. Post et al., (1995), Mol. Biol. Of the Cell, 6: pp. 1755-1768.
- 148. Presley et al., (1997), Nature, 389:81-85.

- 149. Prime and Whitesides, Science, 252: pp. 1164-1167.
- 150. Proffitt et al., (1996), Cytometry, 24:204-213.
- 151. Ridler et al., (1978), IEEE Trans. Systems, Man, and Cybernetics, 8:630-632.
- 152. Rizzuto et al., (1995), Curr. Biology, 5(6):635-642.
- 153. Rizzuto et al., (1992), Nature, 358: pp. 325-327.
- 154. Russ, (1992), The Image Processing Handbook, CRC Press Inc., 225-275.
- 155. Sawin, et al., (1993), In Biological Techniques: Fluorescent and Luminescent Probes for Biological Activity, ed., W.T. Mason, Academic Press, pp. 405-419.

s., ≅r]

- 156. Scneckenburger, et al., (1997), Photochemistry and Photobiology, 66(1), pp. 34-41.
- 157. Self et al., (1995), Methods in Enzymology, 256: pp. 3-10.
- 158. Self and Thompson, (1996), Nature Medicine, 2: pp. 817-820.
- 159. Senter, (1985), Photochem. And Photobiol., 42: pp. 231-237.
- 160. Shimoura et al., (1988), J. of Biochemistry, 251:405-410.
- 161. Schroeder and Neagle, (1996), J. Biomol. Screening, 1: pp. 75-80.
- 162. Sigal, et al., (1996), Anal. Chem., 68: pp. 490-497.
- 163. Singhvi, et al., (1994), Science, 264: pp. 696-698.
- 164. Southwick et al., (1990), Cytometry, 11:418-430.
- 165. Spargo, et al., (1994), PNAS, 91: pp. 11070-11074.
- 166. Stenger, et al., (1992), Journal of the American Chemical Society, 114: pp. 8435-8442.
- 167. Suh, et al., (1983), Proc. SPIE, 382: pp. 199-201.
- 168. Sutoh, (1982), Biochemistry, 21: pp. 3654-3661.
- 169. Swaninathan et al, (1997), Biophysics J., 72: pp. 1900-1907.
- 170. Tanaka et al., (1987), Applied Optics, 26(16): pp. 3301-3307.

- 171. Tanaka et al., (1995), Methods in Enzymology, 256:41-49.
- 172. Tarasova et al., (1997), The Journal of Biological Chemistry, 272(23): pp. 14817-14824.
- 173. Taylor et al., (1992), American Scientist, 80:322-335.
- 174. Taylor et al., (1994), J. Biol. Chem., 269(1):308-318.
- 175. Taylor et al., (1996), Intl. Soc. for Optical Engineering, 2678: 15-27.
- 176. Taylor et al., (1994), Toxicologic Pathology, 22: pp. 145-159.
- 177. Thevinin, et al., (1992), Eur. J. Biochem., 206: pp. 471-477.
- 178. Thomas et al., (1979), Biochemistry, 18(11):2210-2218.
- 179. Tsien, (1989), Methods in Cell Biology, 30:127-156.
- 180. Tyagi et al., (1996), Nat. Biotechnol., 14:303-308.
- 181. Waggoner et al., (1996), Hum. Pathol., 27:494-502.
- 182. Walker et al., (1993), J. Biol. Chem. 268:19552-19558.
- 183. Wang, (1989), Methods in Cell Biology, 29: pp. 1-12.
- 184. Ward et al., (1980), Photochem. Photobiol., 31:611-615.
- 185. Welch et al., (1995), In Vitro Cell. Dev. Biol.-Animal 31:610-616.
- 186. Willner and Rubin, (1996), Chem. Int. Ed. Engl., 35: pp. 367-385.
- 187. Yen, et al., (1989), Makromol. Chem., 190: pp. 69-82.

IV. Pending U.S. Applications

	Serial No.	Filing Date	Author
188.	09/293,210	April 16, 1999	R. Terry Dunlay, et al.

V. Co-Pending Applications

	Serial No.	Filing Date
189.	09/723,256	November 27, 2000
190.	09/718,770	November 22, 2000
191.	09/721,168	November 22, 2000
192.	10/100,957	March 19, 2002
193.	09/716,732	November 20, 2000

VI. Discussion

In accordance with MPEP sections 609 and 707.05(b), it is requested the document cited (including any cited in applicant's specification which is not repeated on the attached Form PTO-1449) be given thorough consideration and that it be cited of record in the prosecution history of the present application by initialing on Form PTO-1449. Such initialing is requested even if the Examiner does not consider a cited document to be sufficiently pertinent to use in a rejection, or otherwise does not consider it to be prior art for any reason, or even if the Examiner does not believe that the guidelines for citation have been fully complied with. This is requested so that each document becomes listed on the face of the patent issuing on the present application.

Date: 1-12-07 My les

David S. Harper, Ph.D. Registration No. 42,636

Respectfully Submitted,

FORM PTO-1449 (Rev. 2-32)



U.S. Department of Commerce. Patent and Trademark Office

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use several sheets if necessary)

Atty. Docket

Serial No. - _

97,022-B2-CO

Applicant: R. Terry Dunlay, et al.

10/686,161

Filing Date:

Group:

October 15, 2003

1641

U.S. PATENT DOCUMENTS

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	1.	5,491,084	02/13/96	Chalfie et al.			
	2.	5,401,629	03/28/95	Harpold et al.			
	3.	5,436,128	07/25/95	Harpold et. al.			
	4.	4,783,401	11/8/98	Horan, et al.			
	5.	4,762,701	08/09/88	Horan et al.			
	6.	4,859,584	08/22/89	Horan et al.			
	7.	5,989,835	11/23/99	Dunlay et al.			
	8.	6,103,479	08/15/00	Taylor			
	9.	5,326,691	7/5/94	Hozier			
	10.	5,384,261	1/24/95	Winkler et al.	•		
	11.	5,313,264	5/17/94	Ivarrson et al.			
	12.	4,673,988	6/16/87	Jansson et al.		<u> </u>	
	13.	5,096,807	3/17/92	Leaback			<u> </u>
	14.	5,556,752	9/17/96	Lockhart et al.			
	15.	5,143,854	9/1/94	Pirrung et al.			
	16.	5,324,591	6/28/94	Georger et al.			
	17.	5,233,369	8/3/93	Carlotta et al.			
	18.	5,486,855	1/23/96	Carlotta et al.			
	19.	5,502,467	3/26/96	Hoisington et al.			
	20.	4,982,739	1/8/91	Hemstreet et al.			<u> </u>
	21.	5,031,797	7/16/91	Boris et al.			

EX	AMINER	DATE CONSIDERED
11		

U.S. PATENT DOCUMENTS

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	22.	5,585,069	12/17/96	Zanzucchi et al.			
	23	5,571,410	11/5/96	Swedberg et al.			
	24.	5,500,071	3/19/96	Kaltenbach			
	25.	4,344,816	8/17/82	Craighead et al.			
	26.	5,581,487	12/3/96	Kelly et al.			
	27.	5,567,294	10/22/96	Dovichi et al.			
	28.	5,527,673	6/18/96	Reinhartz et al.			
	29.	5,548,661	8/20/96	Price et al.			
	30.	5,355,215	10/11/94	Schroeder et al.			
	31.	5,670,113	9/23/97	Akong et al.	•		
	32.	5,732,150	3/24/98	Zhou et al.			
-	33.	5,790,710	8/4/98	Price et al.			
	34.	5,885,840	3/23/99	Kamentsky et al.			
_	35.	5,072,382	12/10/91	Kamentsky et al.			
	36.	5,107,422	4/21/92	Kamentsky et al.			
	37.	4,647,531	3/3/87	Kamentsky et al.	_		
	38.	5,919,646	7/6/99	Okun et al.			

FOREIGN PATENT DOCUMENTS

	,					Translatio	
	Document Number	Date	Country	Class	Subclass	Yes	No
39.	WO 96/27675	9/12/96	PCT				
40.	WO 96/23898	8/8/96	PCT				
41.	WO 95/21191	08/10/95	PCT			···	
42.	WO 95/07463	3/16/95	PCT				
43.	WO 96/09598	03/28/96	PCT				
44.	WO 94/11841	5/26/94	PCT				
45.	WO 87/02802	5/7/87	PCT				

EXAMINER	DATE CONSIDERED

FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Subclass	Trans Yes	slation No
46.	4(1992)-69776	3/4/92	Japanese			X	
47.	H1-165958	6/29/89	Japanese			X	
48.	5-501151	3/4/93	Japanese			Х	
49.	S61-31282	2/4/86	Japanese			X	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc).

	T T T T	OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc).
	50.	Aplin and Hughes, (1997), Anal. Biochem., 113: pp. 144-148.
	51.	Bailey, et al., (1993), Nature, 366: pp. 44-48.
	52.	Barak et al., (1997), J. Biol. Chem, 272(44):27497-27500.
	53.	Barber et al., (1996), Neuroscience Letters, 207:17-20.
	54.	Beggs (1997), J. of Biomolec. Screening, 2(2):71-78.
•	55.	Bell, Jr., et al., (1987), J. Histochem. And Cytochem., 35: pp. 1375-1380.
	56.	Bhatia, et al., (1993), Analytical Biochemistry, 208: pp. 197-205.
	57.	Brejc, et al., (1997), Proc. Natl. Acad. Sci., 94: pp. 2306-2311.
	58.	Bright et al., (1987), J. Cell Biol., 104:1019-1033.
	59.	Bright et al., (1989), Methods in Cell Biology, 30:157-192.
	60.	Bright et al., (1989), J. Cell. Physiol., 141:410-419.
	61.	Bright et al., (1996), Cytometry, 24:226-233.
-	62.	Brinkley, (1992), Bioconjugate Chem., 3: pp. 2-13.
	63.	Bulinski et al., (1997), J. Cell Science, 110: pp. 3055-3064.
	64.	Calvert, et al., (1994), Journal of Vacuum Science and Technology B12: pp. 3884-3997.
	65.	Calvert, et al., (1995), In Thin Films, Vol. 20: Organic Thin Films and Surfaces: Directions for the Nineties, A. Ulman, Ed., Academic Press, Boston, pp. 109-141.
	66.	Chalfie et al., (1994), Science, 263:802-805.
	67.	Channavajjala, et al., (1997), J. Cell. Sci., 110: pp. 249-256.
	68.	Chen et al., (1997), Biophysical Journal, 72: pp. 37-50.
	69.	Cheng, et al., (1996), Nature Biotechnology, 14: pp. 606-609.
	70.	Chrisey, et al., (1994), Proceedings, Materials Research Society, 330: pp. 179-184.

EXAMINER	DATE CONSIDERED

71.	Chrisey, et al., (1996), Nucleic Acids Research, 24: pp. 3031-3039.
72.	Chrisey, et al., (1996), Nucleic Acids Research, 24: pp. 3040-3047.
73.	Clarke and McNeil, (1992), J. Cell Science, 102: pp. 533-541.
74.	Clarke et al., (1994), BioTechniques, 17: pp. 1118-1125.
75.	Cohen, (1997), Biochemical J., 326:1-16.
76.	Craighead, et al., (1980), Appl. Phys. Lett., 37: pp. 653-655.
77.	Craighead, et al., (1982), J. Vac. Sci. Technology., 20: pp. 316-319.
78.	Cubitt et al., (1995), Trends in Biochemical Science, 20:448-455.
79.	Daaka et al., (1998), J. Biol. Chem., 273(2):685-688.
80.	Davis et al., (1995), Dev. Biology, 170:726-729.
81.	DeBiasio et al., (1996), Mol. Biol. Cell, 7:1259-1282.
82.	Denk et al., (1990), Science, 248:73-76.
83.	Deprez et al., (1997), J. Biol. Chem., 272(28):17269-17275.
84.	Dulcey, et al.,(1991), Science, 252: pp. 551-554.
85.	Dulcey, et al., (1996), Langmuir, 12: pp. 1638-1650.
86.	Ehrig, et al., (1995), FEBS Letter, 367: pp. 163-166.
87.	Ellenberg et al., (1997), J. Cell Biol., 138(6):1193-1206.
88.	Farkas et al., (1993), Annu. Rev. Physiol., 55:785-817.
89.	Federov et al., (1994), J. Mol. Biol., 241:480-482.
90.	Firestone et al., (1991), Cytometry, 12:195-206.
91.	Frisch, et al., (1996), Bioconjugate Chem., 7: pp. 180-186.
92.	Gerrittsen et al., (1997), J. of Fluorescence, 7(1):11-15.
93.	Giuliano et al., (1995), Curr. Op. Cell Biol., 7:4-12.
94.	Giuliano et al., (1995), Methods in Neuroscience, 27:1-16.
95.	Giuliano et al., (1987), Anal. Biochem., 167:362-371.
96.	Giuliano et al., (1990), Optical Microscopy for Biology, pp. 543-557.
97.	Giuliano et al., (1995), Annu. Rev. of Biophysics and Biomolecular Structure, 24:405-434.
98.	Giuliano, (1996), Cell Motil. Cytoskel., 35:237-253.
99.	Go et al., (1997), Analytical Biochemistry, 247:210-215.
	72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97.

EXAMINER	DATE CONSIDERED

	100.	Goldmacher, et al., (1992), Bioconjugate Chem., 3: pp. 104-107.
	101.	Goldman et al., (1995), Experimental Cell Research, 221:311-319.
	102.	Gonzales et al., (1995), Biophysics J., 69: pp. 1272-1280.
	103.	Gonzales et al., (1987), Digital Image Processing, pp. 391-448.
	104.	Gough et al., (1993), J. Cell Biol., 121(5):1095-1107.
	105.	Grabarek and Gergely, (1990), Anal. Biochem., 185: pp. 131-135.
	106.	Graham et al., (1973), Virology, 52:456-467.
	107.	Gratton et al., (1994), Proc. of the Microscopical Society of America, pp. 154-155.
	108.	Groen et al., (1985), Cytometry, 6:81-91.
	109.	Hahn et al., (1992), Nature, 359:736-738.
	110.	Hahn et al., (1993), Fluorescent and Luminescent Probes for Biological Activity, W.T. Mason, (ed.), pp. 349-359, Academic Press, San Diego.
•	111.	Harms et al., (1984), Cytometry, 5:236-243.
	112.	Harootunian et al., (1993), Mol. Biol. of the Cell, 4:993-1002.
	113.	Haselhoff, et al., (1997), Proc. Natl. Acad. Sci., 94: pp. 2122-2127.
	114.	Haugland, Fluorescent Tracers of cell morphology and fluid flow, in Handbook of Fluorescent Probes and Research Chemicals, 6 th edition, ed. By Spence, Molecular Probes, Inc. Eugene OR, PP. 325-331, (1996).
	115.	Heim and Tsien (1996), Curr. Biol., 6:178-182.
	116.	Htun et al., (1996), Proc. Natl. Acad. Sci., 93:4845-4850.
	117.	Hu et al., (1995), FEBS Letters, 369:331-334.
	118.	Johnson et al., (1996), <i>Cell</i> , 85:149-158.
	119.	Johnson et al., (1985), J. Electron Microscopy Tech., 2: pp. 129-138.
	120.	Kaether et al., (1995), FEBS Letters, 369:267-271.
	121.	Kahl, et al., (1997), J. Biomol. Screening, 2: pp. 33-40.
	122.	Kapur, et al., (1996), Journal of Biomedical Materials Research, 33: pp. 205-216.
	123.	Kebler et al., (1996), FEBS Letters, 395:225-227.
	124.	Kessler et al., (1991), Spectrochimica Acta, 47A(2):187-192.
	125.	Kislauskis et al., (1994), J. Cell Biol., 127(2):441-451.
	126.	Kittler et al., (1985), Computer Vision, Graphics, and Image Processing, 30:125-147.
	127.	Kleinfeld, et al., (1988), J. Neuroscience, 8: pp. 4098-4120.
	128.	Lakowicz et al., (1992), Anal. Biochem., 202:316-330.
		•

<u> </u>		
EXAMINER	DATE CONSIDERED	
	SATE CONCIDENCES	
	\	

 	Office Booding values, state, care,
129.	Lambrechts et al., (1995), Eur. J. Biochem., 230:281-286.
130.	Lee et al., (1996), Biochemistry, 35:6010-6019.
131.	Lee et al., (1997), Biochemistry, 36:2701-2708.
132.	Liang et al., (1997), J. of Molec. Biol., 274:291-302.
133.	Lopez, et al., (1993), J. Am. Chem. Soc., 115: pp. 5877-5878.
134.	Martinez-Zaguilan et al., (1996), Am. J. Physiol., 270:C1438-C1446.
135.	McCaffrey et al., (1996), J. Biomolec. Screening, 1(4):187-190.
136.	McCann et al., (1997), Proc. Natl. Acad. Sci., 94:5679-5684.
137.	McKenzie, et al., (1988), J. Prot. Chem., 7: pp. 581-592.
138.	McNeil et al., (1984), J. Cell Biol. 98: pp. 1556-1564.
139.	McNeil, (1989), Methods in Cell Biology, 29:153-173.
140.	Morise et al., (1974), Biochemistry, 13(12):2656-2662.
141.	Mrkisch and Whitesides, (1996), Ann. Rev. Biophys. Biomol. Struct., 25: pp. 55-78.
142.	Oancea et al., (1998), The Journal of Cell Biology, 140(3): pp. 485-498.
143.	Palm et al., (1997), Nat. Struct. Biol., 4(5):361-365.
144.	Pillai, (1987), In Organic Photochemistry Volume 9, ed. A. Padwa, Marcel Dekker, Inc. NY, pp. 225-323.
145.	Pillai, (1980), Synthesis, pp. 1-26.
146.	Poot, et al., (1996), J. Histochem. And Cytochem., 44: pp. 1363-1372.
147.	Post et al., (1995), Mol. Biol. Of the Cell, 6: pp. 1755-1768.
148.	Presley et al., (1997), Nature, 389:81-85.
149.	Prime and Whitesides, Science, 252: pp. 1164-1167.
150.	Proffitt et al., (1996), Cytometry, 24:204-213.
151.	Ridler et al., (1978), IEEE Trans. Systems, Man, and Cybernetics, 8:630-632.
152.	Rizzuto et al., (1995), Curr. Biology, 5(6):635-642.
153.	Rizzuto et al., (1992), Nature, 358: pp. 325-327.
154.	Russ, (1992), The Image Processing Handbook, CRC Press Inc., 225-275.
155.	Sawin, et al., (1993), In Biological Techniques: Fluorescent and Luminescent Probes for Biological Activity, ed., W.T. Mason, Academic Press, pp. 405-419.
156.	Scneckenburger, et al., (1997), Photochemistry and Photobiology, 66(1), pp. 34-41.
157.	Self et al., (1995), Methods in Enzymology, 256:3-10.

	EXAMINER	DATE CONSIDERED
I		

		OTHER DOCUMENTS (including Additor, Title, 22to), Cramento 25co, 21c,
	158.	Self and Thompson, (1996), Nature Medicine, 2: pp. 817-820.
	159.	Senter, (1985), Photochem. And Photobiol., 42: pp. 231-237.
	160.	Shimoura et al., (1988), J. of Biochemistry, 251:405-410.
	161.	Schroeder and Neagle, (1996), J. Biomol. Screening, 1: pp. 75-80.
	162.	Sigal, et al., (1996), Anal. Chem., 68: pp. 490-497.
	163.	Singhvi, et al., (1994), Science, 264: pp. 696-698.
	164.	Southwick et al., (1990), Cytometry, 11:418-430.
	165.	Spargo, et al., (1994), PNAS, 91: pp. 11070-11074.
	166.	Stenger, et al., (1992), Journal of the American Chemical Society, 114: pp. 8435-8442.
	167.	Suh, et al., (1983), Proc. SPIE, 382: pp. 199-201.
	168.	Sutoh, (1982), Biochemistry, 21:3654-3661.
	169.	Swaninathan et al, (1997), Biophysics J., 72: pp. 1900-1907.
	170.	Tanaka et al., (1987), Applied Optics, 26(16): pp. 3301-3307.
	171.	Tanaka et al., (1995), Methods in Enzymology, 256:41-49.
	172.	Tarasova et al., (1997), The Journal of Biological Chemistry, 272(23): pp. 14817-14824.
	173.	Taylor et al., (1992), American Scientist, 80:322-335.
	174.	Taylor et al., (1994), J. Biol. Chem., 269(1):308-318.
	175.	Taylor et al., (1996), Intl. Soc. for Optical Engineering, 2678: 15-27.
	176.	Taylor et al., (1994), Toxicologic Pathology, 22: pp. 145-159.
	177.	Thevinin, et al., (1992), Eur. J. Biochem., 206: pp. 471-477.
	178.	Thomas et al., (1979), Biochemistry, 18(11):2210-2218.
	179.	Tsien, (1989), Methods in Cell Biology, 30:127-156.
	180.	
	181.	Waggoner et al., (1996), Hum. Pathol., 27:494-502.
	182.	Walker et al., (1993), J. Biol. Chem. 268:19552-19558.
	183.	Wang, (1989), Methods in Cell Biology, 29: pp. 1-12.
	184.	
	185.	
	186.	
	187.	
L	1.07.	1 rought and (1707), transformer during 1701 pp. 67 02.

EXAMINER	DATE CONSIDERED





IN THE UNITED STATES PATENT AND TRADEMARK OFFICE (Case No. 97,022-B2-C0)

In applicati	on of:	
	R. Terry Dunlay, et al.	Examiner: TBA
Serial No.	10/686,161) Group Art Unit: 1641
Filed:	October 15, 2003	Confirmation No.: 6805
For: A Sv	stem for Cell-Based Screening) }

INFORMATION DISCLOSURE STATEMENT

Honorable Commissioner of Patents and Trademarks P.O. Box 1450 Alexandria. VA 22313-1450

Dear Sir:

Pursuant to 37 C.F.R. Section 1.97 - 1.99, the Applicant wishes to make the following references of record in the above-identified application. This Information Disclosure Statement is in compliance with the continuing duty of candor as set forth in 37 C.F.R. Section 1.56. Copies of the references cited below are enclosed. These references are also listed on the enclosed PTO Form 1449.

In the judgment of the undersigned, portions of the listed references may be material to the Examiner's consideration of the presently pending claims. However, the references have not been reviewed in sufficient detail to make any other representation and, in particular, no representation is intended as to the relative relevance between references, whether cited in this or prior statements. This statement is not a representation that the listed references have effective dates early enough to be "prior art" within the meaning of 35 U.S.C. Section 102 or Section 103.

×	within three months of the filing date of a national application; within three months of the date of entry into the national stage as set forth in 37 C.F.R. § 1.491 in an international application; or before the mailing date of a first Office Action on the merits. 37 C.F.R. §1.97 (b)
	after three months of the filing date of a national application, or the date of entry into the national stage as set forth in 37 C.F.R. § 1.491 in an international application; or after the mailing date of a first Office Action on the merits, but <u>before</u> the mailing date of a Final Action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311 (whichever occurs first), and includes (37 C.F.R. § 1.97 (c):
	the Certification under 37 C.F.R. § 1.97(e) (see "Certification" below)
	OR
	the fee of \$180.00 set forth in 37 C.F.R. § 1.17(p) (see "Fees" below).
	after a Final Action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311 (whichever occurs first), but before, or simultaneously with, the payment of the issue fee, and includes the Certification under 37 C.F.R. § 1.97(e) (see "Certification" below), and the Petition Fee set forth in 37 C.F.R. § 1.17(i) (see "Fees" and "Method of Payment of Fees" below). Applicants hereby petitions for consideration of the Information Disclosure Statement submitted herewith and the accompanying references in examination of the subject patent application.
<u>CERT</u>	<u>TIFICATION</u>
	The undersigned hereby certifies that each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign patent application not more than three months prior to the filing of the Information Disclosure Statement.
	The undersigned hereby certifies that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign patent application or, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of the Information Disclosure Statement.

FEES No fee is owed by the applicant(s). The IDS Fee of \$180.00 under 37 C.F.R. The Petition Fee of \$130.00 set forth in 3 METHOD OF PAYMENT OF FEES			
Attached is a check in the amount of \$180 Charge Deposit Account No. 13-2490 in a communication is enclosed for that purpo	the amount of \$. (A duplicate copy of this		
Please charge any underpayment or credit communication to Deposit Account No. 13-249 enclosed for this purpose.			
CERTIFICATE OF MAILING AS "EXPRESS MAIL" (37 CFR 1.10) I hereby certify that this correspondence and all attached paper(s) or fee(s) is being deposited with sufficient postage, with the United States Postal Service as EXPRESS MAIL POST OFFICE TO ADDRESSEE in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, with sufficient postage, on this/O/Th Day of January, 2005. under Express Mail Certificate No. EV595490362US.			
	Respectfully submitted,		
Date:/_/\$\mathcal{I} - \lambda \mathcal{I} - \mathcal{I} \mathcal	David S. Marper Registration No. 42,636		
	McDonnell Boehnen Hulbert & Berghoff		
Telephone: 312-913-0001 Facsimile: 312-913-0002	300 South Wacker Drive Chicago, IL 60606		
1 acommic. 312-713-0002	Cincago, in 00000		

U.S. Patent Documents

- 1. Lee, et al., U.S. Patent No. 5,627,908, Issued in May 6, 1997.
- 2. R. Terry Dunlay, et al., U.S. Patent No. 6,620,591, Issued on September 16, 2003.
- 3. R. Terry Dunlay, et al., U.S. Patent No. 6,727,071, Issued on April 27, 2004.
- 4. Richard Rubin, et al., U.S. Patent No. 6,759,206, Issued on July 6, 2004.
- 5. R. Terry Dunlay, et al., U.S. Patent No. 6,573,039, Issued on June 3, 2003.
- 6. Kenneth Giuliano, et al., U.S. Patent No. 6,416,959, Issued on July 9, 2002.
- 7. Paul Sammak, et al., U.S. Patent No. 6,716,588, Issued on April 6, 2004.
- 8. R. Terry Dunlay, et al., U.S. Patent No. 6,671,624, Issued on December 30, 2003.

U.S. Published Applications

- 9. R. Terry Dunlay, et al., US2003-0204316-A1, Published on October 30, 2003.
- 10. R. Terry Dunlay, et al., US2004-0009539-A1, Published on January 15, 2004.
- 11. Richard Rubin, et al., US2004-0101912-A1, Published on May 27, 2004.
- 12. Kenneth Giuliano, et al, US2003-0096322-A1, Published on May 22, 2003.

In accordance with MPEP sections 609 and 707.05(b), it is requested the document cited (including any cited in applicant's specification which is not repeated on the attached Form PTO-1449) be given thorough consideration and that it be cited of record in the prosecution history of the present application by initialing on Form PTO-1449. Such initialing is requested even if the Examiner does not consider a cited document to be sufficiently pertinent to use in a rejection, or otherwise does not consider it to be prior art for any reason, or even if the Examiner does not believe that the guidelines for citation have been fully complied with. This is requested so that each document becomes listed on the face of the patent issuing on the present application.

Date: /-12-05

Respectfully Submitted,

David S. Harper Reg. No. 42,636

McDonnell, Boehnen Hulbert & Berghoff LLP

300 South Wacker Drive

Chicago, IL 60606

FORM PTO-1449 U.S. Department of Commerce Atty. Docket No. Serial No. (Rev. 2-32) **Patent and Trademark Office** 97,022-B2-CO 10/686,161 **INFORMATION DISCLOSURE** STATEMENT BY APPLICANT (Use several sheets if necessary) Applicant: R. Terry Dunlay, et al. Filing Date: Group: 1641 October 15, 2003

U.S. PATENT DOCUMENTS

Examiner Initial		Document Number	Issued Date or Publication Date	Name	Class	Subclass	Filing Date if Appropriate
	1.	5,627,908	May 6, 1997	Shih-Jong J. Lee, et al.			September 20, 1994
	2.	6,620,591	September 16, 2003	R. Terry Dunlay, et al.			April 16, 1999
1	3.	6,727,071	April 27, 2004	R. Terry Dunlay, et al.			February 27,1998
•	4.	6,759,206	July 6, 2004	Richard Rubin, et al.			July 12, 1999
	5.	6,573,039	June 3, 2003	R. Terry Dunlay, et al.			August 29, 2000
	6.	6,416,959	July 9, 2002	Kenneth Giuliano, et al.			February 25, 2000
	7.	6,716,588	April 6, 2004	Paul Sammak, et al.			December 8, 2000
	8.	6,671,624	December 30, 2003	R. Terry Dunlay, et al.			November 27, 2000
	9.	2003-0204316-A1	October 30, 2003	R. Terry Dunlay, et al.			May 6, 2003
	10.	2004-0009539-A1	January 15, 2004	R. Terry Dunlay, et al.			April 11, 2003
	11.	2004-0101912-A1	May 27, 2004	Richard Rubin, et al.			October 15, 2003
	12.	2003-0096322-A1	May 22, 2003	Kenneth Giuliano, et al.			March 19, 2002

FOREIGN PATENT DOCUMENTS

	Document Number	Date	Country	Class	Subclass	Trans	lation
						Yes	No
L							

EXAMINER	DATE CONSIDERED